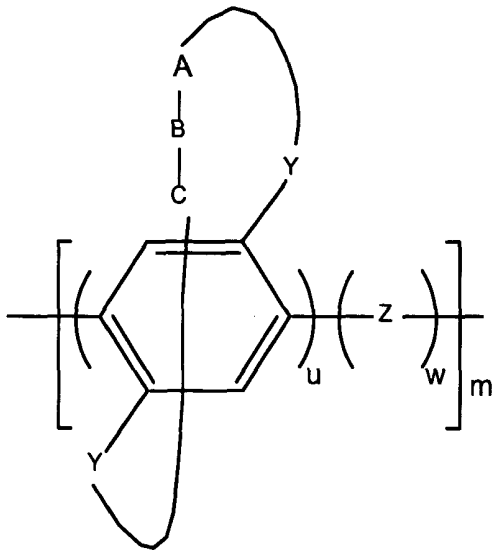
CLAIM AMENDMENTS

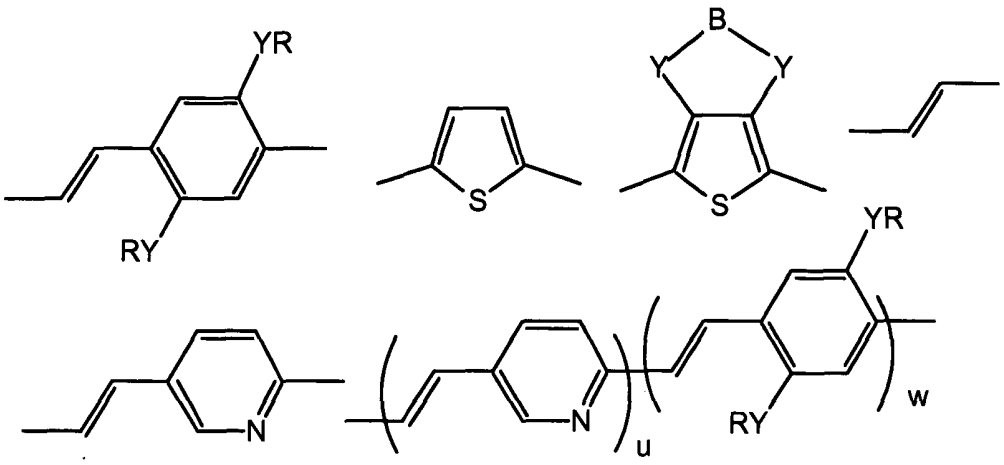
1. (Original) A light emitting polymeric material said light emitting polymeric material capable of producing electroluminescence upon being provided with a flow of electrons, said light emitting polymeric material comprising:

a plurality of polymeric chains comprising polymeric chains each having substituent moieties of sufficient number and size and extending from said polymeric chain and about a substantial portion of the circumference about said polymer chain so as to maintain said polymeric chains in a sufficiently deaggregated state, so as to substantially prevent the redshifting of said electroluminescence and the lowering of light emission efficiency of said electroluminescence.

2. (Original) A light emitting polymeric material according to claim 1 comprising polymeric chains selected from the group consisting of alternating and random copolymers, having the structure:



wherein m is the degree of polymerization; Y is selected from the group consisting of - CH_2, O, S, CO and NR_2 wherein R is an alkyl group containing 1 to 16 carbon atoms; wherein A and C are independently selected from the group consisting of $(CH_2)_n$, $(CH_2CH_2O)_n$, $(CH_2\ CH_2O)_nNR$; wherein R is an alkyl group containing 1 to 16 carbon atoms, and aryl groups having 6 to 14 carbon atoms; B is selected from the group consisting of $(CH_2)_n$, aryl groups having 6 to 14 carbon atoms, and calixarenes having 18 to 200 carbon atoms; wherein u may be of a value independently selected from the group 1 to 6, inclusive; wherein w may be of a value independently selected from the group 1 to 6, inclusive; wherein n may be of a value independently selected from the group 0 to 6, inclusive; and wherein Z may be a structure selected from the group consisting of :



wherein R is an alkyl group containing 1 to 16 carbon atoms; wherein Y is selected from the group consisting of - CH_2, O, S, CO and NR_2 wherein R is an alkyl group containing 1 to 16 carbon atoms; B is selected from the group consisting of $(CH_2)_n$, aryl groups having 6 to 14 carbon atoms, and calixarene having 18 to 200 carbon atoms; wherein u may be of a value independently selected from the group 1 to 6, inclusive; and wherein w may be of a value independently selected from the group 1 to 6, inclusive.

3. (Original) A light emitting polymeric material according to claim 1 wherein said polymeric material is further provided with a layer of an electron blocking polymer.

4. (Original) A light emitting polymeric material according to claim 3 wherein said electron blocking polymer is selected from the group consisting of poly(vinylcarbazole).

5. (Original) A light emitting device, said device comprising a light emitting polymeric material according to claim 1, and a source of electrical current so as to supply said electron transporting polymer with a flow of electrons.

6. (Original) A light emitting device, said device comprising a light emitting polymeric material according to claim 1, and a source of electrical current so as to supply said electron transporting polymer with a flow of electrons, said device selected from the group consisting of single layer, bilayer and multi-layer light emitting devices.

7. (Currently amended) A light emitting polymeric material, said light emitting polymeric material capable of producing electroluminescence upon being provided with a flow of electrons, said light emitting polymeric material comprising:

a plurality of ~~polymeric~~ rotaxanes ~~chains~~ each comprising a polymeric chains ~~each being provided~~ having ~~with rotaxenes~~ at least one ring ~~of sufficient number and size and~~ extending ~~from said polymeric chain and~~ about ~~a substantial portion of~~ the circumference ~~about~~ of said polymer chain so as to maintain said ~~polymeric chains~~ rotaxanes in a sufficiently deaggregated state, so as to substantially prevent the redshifting of said electroluminescence and the lowering of light emission efficiency of said electroluminescence.

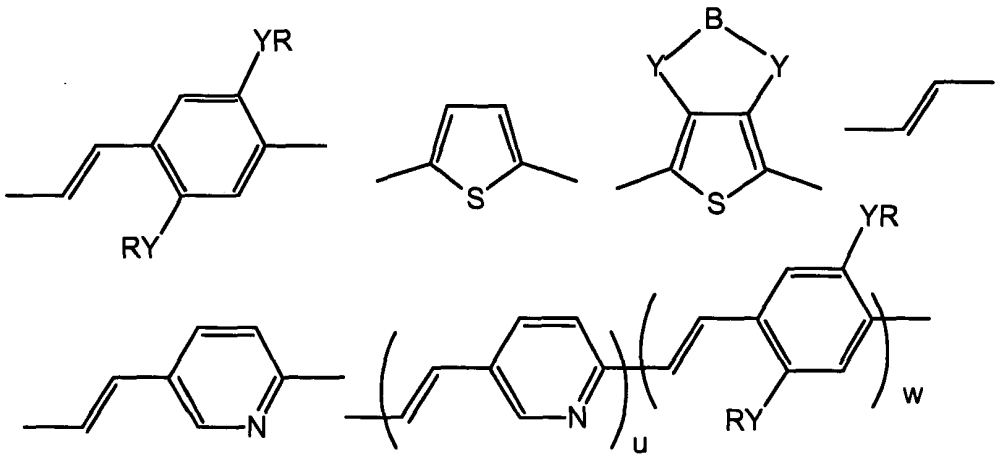
8. (Original) A light emitting polymeric material according to claim 7 wherein said light emitting polymeric material is further provided with a layer of an electron blocking poiymer.

9. (Currently amended) A light emitting polymeric material according to claim 8 wherein said electron blocking polymer is ~~selected from the group consisting of~~ poly(vinylcarbazole).

10. (Original) A light emitting device, said device comprising a light emitting polymeric material according to claim 7, and a source of electrical current so as to supply said electron transporting polymer with a flow of electrons.

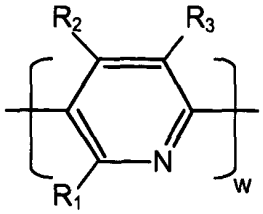
11. (Newly added) A light emitting device, said light emitting device comprising a layer of light emitting polymeric material according to claim 1 wherein said layer of light emitting polymeric material is between a first polymeric layer and a second polymeric layer, wherein said first polymeric layer comprises a material selected from the group consisting of semi-conductive and conductive polymers and wherein said second polymeric layer comprises a material selected from the group consisting of semi-conductive and conductive polymers.

12. (Newly added) The light emitting polymeric material according to claim 7, wherein at least one said polymeric chain is selected from the group consisting of alternating and random copolymers having at least one structure selected from the group consisting of:

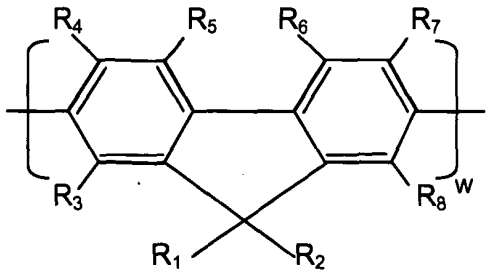


wherein R is an alkyl group containing 1 to 16 carbon atoms; wherein Y is selected from the group consisting of - CH_2, O, S, CO and NR_2 wherein R is an alkyl group containing 1 to 16 carbon atoms; B is selected from the group consisting of $(CH_2)_n$, aryl groups having 6 to 14 carbon atoms, and calixarene having 18 to 200 carbon atoms; wherein u may be of a value independently selected from the group 1 to 6, inclusive; and wherein w may be of a value independently selected from the group 1 to 6, inclusive.

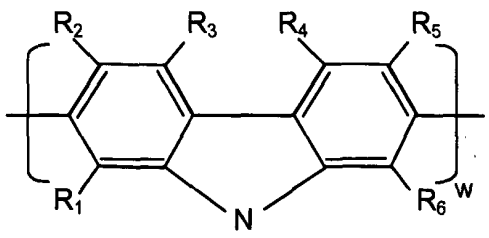
13. (Newly added) The light emitting polymeric material according to claim 7, wherein at least one said polymeric chain is selected from the group consisting of alternating and random copolymers having at least one structure selected from the group consisting of:



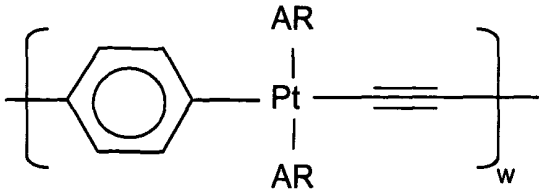
wherein R_1, R_2, and R_3 are independently selected from the group consisting of hydrogen, alkyl groups, alkoxy groups, aromatic groups, and $N(R)_2$ where R is an alkyl group comprising from 1 to 16 carbon atoms, and wherein w is a value from 1 to about 100;



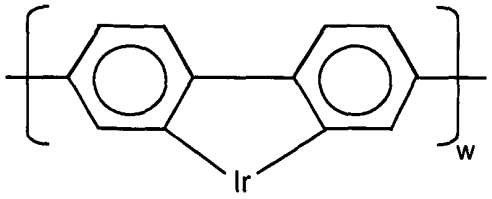
wherein R_1 and R_2 are each independently selected from the group consisting of hydrogen, alkyl groups, alkoxy groups, aromatic groups, spiroflourenes, and $N(R)_2$ where R is an alkyl group comprising from 1 to 16 carbon atoms, wherein R_3 through R_8 are each independently selected from the group consisting of hydrogen, alkyl groups, and alkoxy groups, aromatic groups, and $N(R)_2$ and wherein w is a value from 1 to about 100;



wherein R_1 – R_6 are each independently selected from the group consisting of hydrogen, alkyl groups, and alkoxy groups, and wherein w is a value from 1 to about 100;

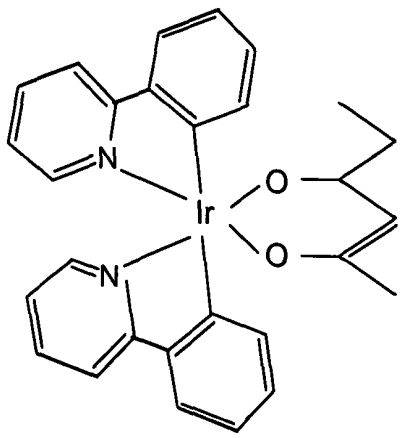


wherein AR is an aromatic group and w is a value from 1 to about 100; and

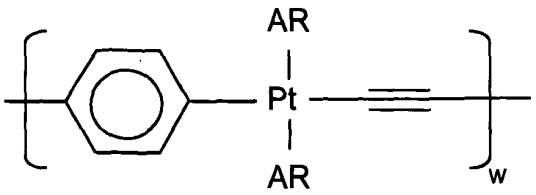


wherein w is a value from 1 to about 100.

14. (Newly added) The light emitting polymeric material according to claim 7, wherein at least one said ring is selected from the group consisting of: cyclodextrins, cyclophanes, rings comprising



, rings comprising



wherein AR is an aromatic group and w is a value from 1 to about 100, rings comprising pyridine groups, and rings comprising quinoline groups.

15. (Newly added) The light emitting polymeric material according to claim 7, wherein said polymeric chain of said rotaxane is not covalently bonded to said ring of said rotaxane.

16. (Newly added) A light emitting device, said light emitting device comprising a layer of light emitting polymeric material according to claim 7 wherein said layer of light emitting polymeric material is between a first polymeric layer and a second polymeric layer, wherein said first polymeric layer comprises a material selected from the group consisting of semi-conductive and conductive polymers and wherein said second polymeric layer comprises a material selected from the group consisting of semi-conductive and conductive polymers.